

A marked-up copy of the claim(s) changed by this amendment, showing all changes made relative to the previous version of the claim(s), accompanies this paper on a separate sheet or sheets of APPENDIX.

REMARKS

Claims 19-24 are objected to under 37 CFR 1.75(c) as being in improper dependent form for failing to further limit the subject matter of a previous claim. These claims have been cancelled by the present amendment.

Claim 14 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 13. Both of these claims have been cancelled.

Claims 1-24 are rejected under 35 USC 112, second paragraph, for various reasons.

In claim 1, the phrase 'obtainable by a method comprising' is said to be unclear in it's scope. Claim 1 has been amended to delete this phrase, and to recast the claim as a method of producing a lacquer composition.

Also in claim 1, the term 'the reaction mixture' is said to lack antecedent basis. Claim 1 has been amended to positively recite a method step for producing a reaction mixture.

In claims 3 and 11, the term 'comprises' in connection with the term 'alkoxide compound' makes it unclear whether the alkoxide is intended to be limited to the metal diketonates. Claim 3 has been amended to adopt the alternate phraseology 'wherein the metal alkoxide is a metal diketonate' suggested by the Examiner. Claim 11 has been amended to delete direct reference to the alkoxide compound.

In claim 6, it is said to be unclear how the second organosilane differs from the organosilane of claim 1. Claims 1 and 4 have been amended to refer to the organosilane compound as a 'first organosilane compound' in order to distinguish it from the 'second organosilane compound' of claim 6.

In claims 9-18, the phrase 'is used' is said to not positively recite the method. Claim 9 has been amended to delete the term 'using'. Claims 10 and 11 have been recast. The remaining claims have been cancelled.

In view of the above amendments, it is felt that the rejection under 35 USC 112, second paragraph, has been overcome, and it is urged that the rejection be withdrawn.

Claims 1-24 are rejected under 35 USC 103(a) as being unpatentable over Hitachi (EP 0 768 352 A1).

Hitachi teaches a silica-base coated insulation film obtained from an alkoxy silane and/or a partially hydrolyzed product thereof, a fluorine-containing alkoxy silane and/or an alkyl alkoxy silane, a metal alkoxide and an organic solvent. Hitachi also teaches that the partially hydrolyzed product may be obtained by reaction in the solvent after addition of water and an acid or an alkali as a catalyst. (See the ninth and tenth paragraphs of the DISCLOSURE OF INVENTION).

Hitachi does not specifically state that the acid catalyst is preferred, it is stated that the acid catalyst more quickly makes a product having a high molecular weight. (See the fourteenth paragraph of the DISCLOSURE OF INVENTION).

Hitachi does not teach the addition of silica particles to the mixture. Hitachi does point out that the addition of silica particles to an SOG film has been studied, but with no positive results. (See last paragraph of BACKGROUND ART).

While Hitachi does not teach the addition of silica particles to the reaction mixture, nevertheless, the Examiner argues that 'the excess tetraalkoxy silane upon hydrolysis and condensation would have been expected to form at least minor amounts of silica particles'.

Hitachi does not support this contention, and the Examiner has failed to provide any other prior art reference to

support this contention. Moreover, Applicant is not claiming a method in which silica particles are produced as a by-product of a reaction, but rather positively sets forth the addition of silica particles to the reaction mixture.

Moreover, Applicant specifically teaches that the silica particles are added in order to provide for increased strength and reduced shrinkage, and that basic conditions are needed to positively charge the particles, resulting in improved stability and reduced tendency toward flocculation. See page 2, lines 7-14 of Applicant's specification).

Since Hitachi fails to teach or suggest that silica particles must be added to the reaction mixture under basic conditions, it is urged that the claims are patentable over the reference, and that the rejection is in error and should be withdrawn.

Claims 1, 2, 4-10, 12, 15-19 and 21-24 are rejected under 35 USC 103(a) as being unpatentable over Nissan (EP 0 611 812 A2).

Claims 12-19 and 21-24 have been cancelled. Claims 1, 2 and 4-8 have been amended to claim a method of producing a lacquer composition (claims 1, 2 and 4-7) and a lacquer coating (claim 8), while claims 9 and 10 have been amended to claim a coated product and a lacquer starting composition, respectively.

In each of the above claims, it is clear that silica particles are added to the reaction mixture, not produced by the reaction. In contrast, Nissan forms silica particles as the hydrolyzed product of tetraalkoxysilane.

Nissan does not teach or suggest the positive step of adding silica particles to a reaction mixture prior to reaction. Accordingly, it is urged that the rejected claims are patentable over the cited reference, and that the rejection is in error and should be withdrawn.

In view of the above arguments and amendments, it is felt that the present application is in condition for allowance, and a Notice of Allowance is respectfully requested.

Respectfully submitted,

John C. Fox

John C. Fox, Reg. 24,975

Attorney for Applicants

203-329-6584

MARKED-UP AMENDED CLAIMS

1. A method for producing a lacquer composition, obtainable by a the method comprising the steps step of mixing together an a first organosilane compound, a metal alkoxide and silica particles under basic conditions, wherein a metal alkoxide is added to the to form a reaction mixture.
2. A lacquer composition method according according to claim 1, wherein the metal alkoxide is a zirconium alkoxide, an aluminum alkoxide, a titanium alkoxide or a mixture thereof.
3. A lacquer composition method according to claim 1, wherein the metal alkoxide comprises is a metal diketonate.
4. A lacquer composition method according to claim 1, wherein the first organosilane compound is an epoxysilane.
5. A lacquer composition method according to claim 4, wherein the epoxysilane is 3-glycidyloxypropyltrimethoxysilane.

6. A ~~lacquer composition~~ method according to claim 1,  
wherein at least a second organosilane compound is ~~present~~ added to  
the reaction mixture.

7. A ~~lacquer composition~~ method according to claim 6,  
wherein the second organosilane compound comprises a tetra-  
alkoxysilane.

8. A ~~method of applying a lacquer coating to a substrate in~~  
~~which method a lacquer composition is applied to the substrate and~~  
~~eured, thereby forming the lacquer coating, wherein a lacquer~~  
~~composition as claimed in claim 1 is used, comprising the further~~  
~~steps of coating a substrate with the reaction mixture, and curing~~  
the reaction mixture to form a lacquer coating on the substrate.

9. A Product provided with a lacquer coating, wherein the  
lacquer coating is obtained by ~~using~~ the method as claimed in claim  
8.

10. A starting material composition for obtaining a lacquer  
composition as claimed in claim 1, the starting material  
composition comprising an organosilane compound, silica particles,  
a base, and a metal alkoxide.

11. A lacquer composition comprising the reaction product of  
the starting material composition of claim 10. according to claim  
2, wherein the metal alkoxide comprises a metal diketonate.